

What is claimed is:

1           1.     An active-matrix type display device comprising:  
2           light emitting devices;  
3           scanning lines:  
4           data lines;  
5           transistors;  
6           switches;  
7           a variable bias voltage generating circuit used to generate  
8     a variable bias voltage; and  
9           wherein one end of each of said light emitting devices is  
10    connected to a source (or a drain) of a corresponding transistor  
11    and said drain (or said source) of said transistor is connected  
12    to an output terminal of said variable bias voltage generating  
13    circuit and a gate of said transistor is connected to a  
14    corresponding data line through a corresponding switch; and  
15           wherein said switch is brought into conduction by  
16    activating a corresponding scanning line and an image signal is  
17    fed through said data line and said switch to said gate of said  
18    transistor and said variable bias voltage generating circuit  
19    controls said variable bias voltage so that a current flowing  
20    through said each light emitting device in response to control  
21    information becomes a specified value.

1           2.     The active-matrix type display device according to  
2     Claim 1, wherein a capacitor is connected between said gate of  
3     said transistor and either of said source or said drain of said  
4     transistor not being connected to said light emitting device.

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1           3.     The active-matrix type display device according to  
2     Claim 1, wherein said light emitting device is an electro-  
3     luminescent device.

1           4.     The active-matrix type display device according to  
2     Claim 1, wherein, when said image signal is not input through said  
3     data line for a specified period of time or more, said an said  
4     output voltage is decreased.

1           5.     The active-matrix type display device according to  
2     Claim 1, wherein, when importance of said image signal input  
3     through said data line is judged to be low, said variable bias  
4     voltage generating circuit is controlled so that an output voltage  
5     is decreased.

1           6.     An active-matrix type display device comprising:  
2     a variable bias voltage generating circuit;  
3     light emitting devices, scanning lines, data lines,  
4     transistors, and switches, which are arranged in a matrix form;  
5     and

6           wherein one end of each of said light emitting devices is  
7     connected to a source (or a drain) of a corresponding transistor  
8     and either of said source or said drain of said transistor being  
9     mounted on a first column to Nth (N is an integer being two or  
10    more) column is connected to any one of a first output terminal  
11    to an Nth output terminal of said variable bias voltage generating  
12    circuit and a gate of said transistor is connected through a  
13    corresponding switch to a corresponding data line; and

14          wherein said switch is brought into conduction when a

15 corresponding scanning line is activated and an image signal is  
16 fed through said data line and said switch to said gate of said  
17 transistor and said variable bias voltage generating circuit  
18 independently controls each of variable bias voltages output from  
19 said first output terminal to said Nth output terminal of said  
20 variable bias generating circuit so that a current flowing through  
21 said each light emitting device mounted on each of said columns  
22 in response to control information becomes a specified value.

1 7. The active-matrix type display device according to  
2 Claim 6, wherein a value of said N is set to 3 and said light  
3 emitting device emitting a first color is disposed in a first  
4 column group made up of  $3m$  ( $m = 0, 1, 2, \dots$ ) + 1 columns, said  
5 light emitting device emitting a second color is disposed in a  
6 second column group made up of  $3m + 2$  columns and said light  
7 emitting device emitting a third color is disposed in a third  
8 column group made up of  $3(m + 1)$  columns.

1 8. The active-matrix type display device according to  
2 Claim 6, wherein a capacitor is connected between said gate of  
3 said transistor and either of said source or said drain of said  
4 transistor not being connected to said light emitting device.

1 9. The active-matrix type display device according to  
2 Claim 6, wherein said light emitting device is an electro-  
3 luminescent device.

1 10. The active-matrix type display device according to  
2 Claim 6, wherein, when said image signal is not input through said

3 data line for a specified period of time or more, said an said  
4 output voltage is decreased.

1 11. The active-matrix type display device according to  
2 Claim 6, wherein, when importance of said image signal input  
3 through said data line is judged to be low, said variable bias  
4 voltage generating circuit is controlled so that an output voltage  
5 is decreased.

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